

WHAT IS CLAIMED IS:

1. An aqueous one-component (1K) coating systems comprising
 - 5 (I) at least one polyurethane (A) which contains chemically bonded hydrophilic groups and from 0 to 0.53 mmol/g, based on the nonvolatile fraction of the dispersion, of groups containing Zerewitinov-active hydrogen atoms, and
 - 10 (II) at least one polyisocyanate (B) in which the NCO groups have been reversibly blocked and which contains no hydrophilic groups, and
 - (III) water,
- 15 the proportion of components (A) and (B) being such that the blocked isocyanate content is between 0.01 and 1.0 mol/100 g resin solids.
2. The aqueous (1K) coating systems according to Claim 1, wherein the polyurethane (A) is a reaction product of
 - 20 A1) polyisocyanates,
 - A2) polymeric polyols and/or polyamines having number average molecular weights of from 400 to 8 000,
 - 25 A3) optionally mono- or polyalcohols or mono- or polyamines or amino alcohols having molecular weights of up to 400,
- and at least one compound selected from
 - 30 A4) compounds which have at least one ionic or potentially ionic group and

A5) nonionically hydrophilicized compounds.

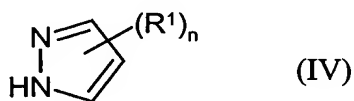
3. The aqueous (1K) coating systems according to Claim 1, wherein the polyurethane (A) includes as building blocks a combination of nonionic and ionic hydrophilicizing agents.

4. The aqueous (1K) coating systems according to Claim 1, wherein the polyisocyanates (B) are prepared by reacting

(B1) at least one polyisocyanate having aliphatically, cycloaliphatically, araliphatically and/or aromatically bonded isocyanate groups containing no hydrophilic groups with

(B2) at least one blocking agent.

5. The aqueous (1K) coating systems according to Claim 4, wherein the blocking agent for the isocyanate groups are pyrazole derivatives of the general formula (IV),



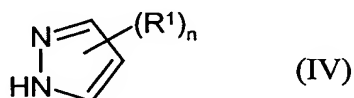
in which

R^1 corresponds to one or more (cyclo)aliphatic hydrocarbon radicals each having 1 to 12 carbon atoms, which contains no chemically bonded hydrophilic groups, and

n can be an integer from 0 to 3, preferably 1 or 2.

6. The aqueous (1K) coating systems according to Claim 4, wherein the blocking agent is 3,5-dimethylpyrazole or 3-methylpyrazole.
- 5 7. A process for preparing aqueous the (1K) coating systems according to Claim 1 comprising mixing component (B) into the polyurethane (A) prior to dispersing.
- 10 8. A process for producing coatings comprising applying the aqueous (1K) coating system according to Claim 1 to a substrate, wherein the water is at least partly removed and then thermal curing is carried out.
9. The process for producing coatings according to Claim 8, wherein the substrate is glass fibre or carbon fibre.
- 15 10. Substrates coated with a coating compositions comprising (1K) coating systems according to Claim 1.
11. A method of sizing glass fibre comprising applying the aqueous (1K) coating systems according to Claim 1 to glass fibre.
- 20 12. The aqueous (1K) coating systems according to Claim 2, wherein the polyurethane (A) includes as building blocks a combination of nonionic and ionic hydrophilicizing agents.
- 25 13. The aqueous (1K) coating systems according to Claim 2, wherein the polyisocyanates (B) are prepared by reacting
 - (B1) at least one polyisocyanate having aliphatically, cycloaliphatically, araliphatically and/or aromatically bonded isocyanate groups containing no hydrophilic groups with
 - 30 (B2) at least one blocking agent.

14. The aqueous (1K) coating systems according to Claim 5, wherein the blocking agent is 3,5-dimethylpyrazole or 3-methylpyrazole.
15. The aqueous (1K) coating systems according to Claim 4, wherein the blocking agent for the isocyanate groups are pyrazole derivatives of the general formula (IV),



in which

R¹ corresponds to one or more (cyclo)aliphatic hydrocarbon radicals each having 1 to 12 carbon atoms, which contains no chemically bonded hydrophilic groups, and

n can be an integer from 0 to 3, preferably 1 or 2.

16. The aqueous (1K) coating systems according to Claim 15, wherein the blocking agent is 3,5-dimethylpyrazole or 3-methylpyrazole.
17. The aqueous (1K) coating systems according to Claim 3, wherein the polyisocyanates (B) are prepared by reacting

(B1) at least one polyisocyanate having aliphatically, cycloaliphatically, araliphatically and/or aromatically bonded isocyanate groups containing no hydrophilic groups with

(B2) at least one blocking agent.